

AMENDMENTS TO THE SPECIFICATION

IN THE ABSTRACT OF THE DISCLOSURE:

Replace the Abstract of the Disclosure currently of record with the attached new Abstract of the Disclosure.

AI
A solid-state image pickup apparatus capable of performing, for instance, AE control by means of an image signal containing all colors used for color separation in photosensitive cells arranged in a honeycomb-like structure, and signal reading out method therefor. A digital still camera supplies a signal in a mode set by a mode setting section to a system control section. Upon receiving the signal, the system control section controls a drive signal generation section to generate a drive signal. Incident ~~incident~~ lights are supplied onto an image pickup section through color separation filters having filter segments of identical colors arranged in a column direction. The image pickup section photoelectrically converts the lights incident to the respective photosensitive cells. A drive signal generated by the drive signal generation section according to the specified mode is supplied to a signal reading out gate, so that a transfer for the signal charges is performed. In this case, signals for all the colors are read out in response to the drive signal in compliance with the color filter arrangement of the color separation filters. The signals read out are used by AF and AE adjustment sections for appropriate controls.

IN THE SPECIFICATION:

Please replace the paragraph beginning at page 1, line 27 with the following new paragraph:

AB In the apparatus disclosed in Japanese patent publication No.31231/1992, first electrodes meander along photosensitive cells which are arranged in the offset manner, so as to form a wavy shape pattern, and second electrodes are formed in another wavy pattern opposite in phase to the former. Other photosensitive cells are arranged in a region where the first and second electrodes separate so as to enable a signal to be read out from each cells via means for selectively coupling with the second electrodes, in response to an enable signal supplied to the first electrode, thus further increasing the resolution and the sensitivity of the solid-state image pickup apparatus from conventional. In the publication, the photosensitive cells are ~~is~~ exemplified as formed octagonal.

Please replace the paragraph beginning at page 8, line 33
with the following new paragraph:

A3 FIGS. 21A, 21B and 21C are [[a]] schematic views useful for
understanding the flow of signal charges in the image
pickup device after the transfer of FIG. 20D.

Please replace the paragraph beginning at page 10, line 1
with the following new paragraph:

A4 The image pickup system 10A ~~10B~~ includes an optical lens
102, an image pickup device 104, an AF control 106 having a
focusing mechanism and an AE control 108 having an aperture
mechanism. In addition to these elements, although not shown,
to completely shut off an incident light, a shutter mechanism
may be included in an incident light side of the image
pickup device 104. The optical lens 102 is an optical
system for focusing the incident light from an object field
on a photosensitive array of the image pickup device 104.

Please replace the paragraph beginning at page 25, line 3 with the following new paragraph:

As the honeycomb type stripe pattern is employed for the color separation filters CF, it can be understood from FIG. 4 that the photosensitive cells 104a of color R are adjacent to the vertical transfer devices V1 and V5, and the photosensitive cells 104a of color G are adjacent to the vertical transfer devices V3 and V7. In this case, the transfer gate signals TG₃ and TG₇ are supplied to make the A4 signal reading out gates 104b adjacent to the vertical transfer devices V1 and V5 is switched to the OFF state thereof, and the signal reading out gates 104b adjacent to the vertical transfer devices V3 and V7 is switched to the ON state thereof. These timing relations are shown in FIG. 9. The other transfer gate signals TG₁ and TG₅ are at "H" levels. Accordingly, the signal reading ~~reading~~ out gates 104b adjacent to the vertical transfer devices V1 and V5 are in the OFF states thereof, so that signal charges of colors R, G and B cannot be read out. These relations are indicated by the hatched pixels of reading out prohibited lines of signal charges and reading out permitted lines of signal charges shown in FIG. 10.
